APPLY THE SERVQUAL TOOL TO ASSESS SERVICE QUALITY FOR HOME HEALTHCARE SERVICES

Dissertation Submitted to

The IIHMR University, Jaipur
for the partial fulfillment for the reward for the award of the degree of
Master of Business Administration (MBA)
in
Hospital and Health Management
By

LAHARI SAIPRIYA

Under the Supervision and Guidance of
Mr. Arindam Das

2022

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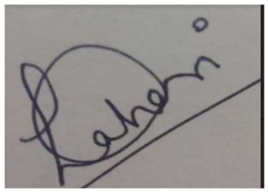
DECLARATION BY STUDENT

I hereby declare that this dissertation titled Study **Apply The Servqual Tool To Assess Service Quality For Home Healthcare Service** is the bonafide record of my original research work. I declare that it has not been submitted to any other university or institution for the award of any degree or diploma. Information derived from the published or unpublished work of others has been duly acknowledged in the text.



Lahari Saipriya

Date - 30th June 2022

CERTIFICATE

Seva At Home

1st July 2022

To whomsoever it may concern

This is to certify that Ms Lahari Saipriya has successfully completed her internship from 21st March 2022 to 19th June 2022 with Seva at Home India Pvt. Ltd. During her internship she worked on Project "Apply the servqual tool to assess service quality for home healthcare services".

She was found to be hardworking and sincere during this period. We wish her the very best in all her future endeavours.

For **Seva at Home India Pvt. Ltd.**

Bindiya

Ms. Bindiya Reddy

General Manager – Human Resources

CERTIFICATE

This is to certify that dissertation titled Apply Servqual tool to assess the service quality of home healthcare services is a record of the research work undertaken by Lahari Saipriya in partial fulfillment of the requirements for the award of the degree of MBA (Hospital and Health Management) from the IIHMR University, Jaipur under my guidance and supervision and her approach to the research study has been sincere, scientific, and analytical.

Faculty Guide
IIHMR University, Jaipur

Date: 20th June 2022

School Dean
IIHMR University, Jaipur

Date: 20th June 2022

ABSTRACT

Title – **Apply the Servqual Tool To Assess Service Quality For Home Healthcare Services.**

Background Of the Study - The goal is to decentralize healthcare, resulting in a shift away from in-hospital treatment and toward more sophisticated home care while enhancing efficiency, individualization, equity, and quality of care without constraining budgetary resources**.** Healthcare services are a sort of available treatment services provided at home by healthcare practitioners and might include medical treatment or professional caretakers who assist with daily activities. Nursing services at home, healthcare attendant services at home, and therapeutic services are examples of these services. Physical therapists provide this sort of service at home. As a result, there is a potential to free up hospital beds and rapidly transition to home health care.

Patients receiving healthcare services come from a variety of circumstances, including childcare, geriatric care, cancer treatment, immobility, severe illness, paralysis, dementia, and so on. Patients' expectations must be considered in the delivery of health services since this information can not only assist guarantee that medical procedures are effective from an expert's perspective, but it can also help achieve functional quality goals. Client perceptions of service quality are based on a comparison of their expectations before to service with their actual service experience. Parasuraman et al. established a scale for assessing service quality based on this viewpoint, which is known as SERVQUAL. A service quality gap develops when expectations exceed perceptions. The SERVQUAL instrument measures the relative impact of five factors on customer perceptions, including tangibility, reliability, responsibility, assurance, and empathy, and may be used to track quality trends over time.

Objective –

The most basic prerequisite for improving service quality is to measure it. One of the organization's objectives is to provide high-quality services at a low cost. As a result, the primary goal is to provide high-quality services to home healthcare patients, and to do so, we must first establish the gap between what the company believes it is delivering to customers and the customer's perspective.

- To understand the customer perspective of the services.

- To measure the gap between customer expectations and organizational services delivery.
- To suggest the improvements in order to improve the quality of home healthcare services.

Methodology –

This survey is cross-sectional analytical research involves convenient sampling of active home healthcare patients that have used or are intending to use the organization's services, for a variety of medical conditions. These people have a caretaker or nurse from the organization arrive to their house. The research took place from March 21st through June 20th, 2022. The SERVQUAL questionnaire, which was used throughout the research to capture the patients' expectations and perception score, was designed with 20 questions separated into two sets of identical questions for before and after the services began respectively. The service expectation score is recorded in one set, while the service perception score is recorded in the other, both from active home healthcare patients and their family members. The perspective was recorded after the services were begun within two weeks or more.

Sample size: 100

Sampling procedure: Convenient sampling

Study design: Qualitative and observational study

Results

A total of 100 respondents answered the questionnaire. The respondents were demographically classified based on the age groups, diagnosis reason, geographic location and average length of stay. The survey results were tabulated, and it was found that the average perception scores for the five dimensions exceeded 80% perception threshold indicating an acceptable level of service delivery for home healthcare services.

The results showed a significant gap between importance and performance in all five dimensions of service quality. In reviewing the gap, tangibility – (-1.74), reliability (-4.03), responsiveness (-2.95), assurance (-3.03), empathy (-2.55).

Conclusion –

The negative gap in all quality characteristics demonstrates that quality improvement is required in all areas. Managers may plan for service quality improvement by using quality and diagnosis measuring devices like importance–performance analysis. These analyses can assist

us in being more patient-centered, cost-containment, improvement-focused, and performance-enhancing. These also provide us with the short-, mid-, and long-term emphasis areas that we may use to make it more efficient.

Keywords –
Servqual, home healthcare, patient satisfaction, caretaker, critical care at home, nursing care at home**.**

ACKNOWLEDGEMENT

On the very beginning of this report, I would like to extend my sincere gratefulness and heartfelt appreciativeness towards all the respected personages who have helped me to attempt this endeavor. Without their active guidance, assistance, cooperation, and motivation, I would not have made advancement in the report. It is a privilege to have a wonderful 90 days (22nd March – 19th June) internship in India's leading home healthcare organization. The internship experience I had with the **SEVA AT HOME, GURUGRAM** was a great chance for growth, learning and professional evolution. I am appreciative for this chance and for getting an opportunity to meet such countless brilliant individuals and experts who directed me through this internship.

I would like to take this moment to express my deepest acknowledgment and special recognition to the Chief Operating Officer, **Mr. Arun Datta sir**, who despite being outstandingly busy with his work schedule, took time to listen, direct and keep us on the rightful path and permitting us to carry our internship at the organization and guiding throughout the internship.

It is my deepest emotion to place on record my best compliments and deep sense of gratitude to Ms. **Bindiya Reddy** (HR - General Manager) for providing necessary advice, guidance, and information during every step. I am using this opportunity to admit their contribution delightfully.

I would like to express genuine thanks to **Dr. P.R. Sodani** (President, IIHMR university, Jaipur) for giving me a chance to do summer internship. Now, I would like to express my honest gratitude towards my mentor at IIHMR University, **Mr. Arindam Das** for his support, invaluable instructions, and supervision. This report is the result of his meticulous and generous outlook.

I would also like to express a deep sense of gratitude **Ms. Shreya Sarkar**, my colleague to help me in tough times and to the Placement Cell of my esteemed university for guiding me throughout the internship process and for providing time to time internship guidelines.

I comprehend this possibility as a big milestone in my career progression. I will always attempt to use learned skills and knowledge in the best potential way, and will strive to work on the developments, to attain desired career aspirations.

LAHARI SAIPRIYA

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ABBREVATIONS

1. Covid- Corona Virus
2. Servqual – Service Quality
3. Who- World Health Organization
4. CRM– Customer Relation Manager
5. T- Tangibility
6. Rl- Reliability
7. R1- Responsiveness
8. A- Assurance
9. E- Empathy

CHAPTER: 1 INTRODUCTION

1.1 Home healthcare services and its types

Taking care of the health of each family member has become more difficult as communities all through the world have become progressively nuclear. Indeed, it is problematic for working members of the family to manage their professional duties with the family's health demands. Everything from childbirth to postoperative care to general ailments needs medical as well as personal attention.

The home healthcare facility was designed specifically to address the demands of such active families. India Home Health Care was the first to offer home health care services in India in 2009, and since then, a long list of companies have followed in its footsteps, including Health Care at Home, Zoctr, Portea, Care24, and others. Home healthcare represents approximately $3.2 billion of India's $100 billion healthcare economy.

- **Doctor's visit**

If a patient is in need or is suffering from a terrible illness while travelling to the hospital, a doctor may visit their home to diagnose and treat their sickness (es). He or she might also regularly evaluate the necessity for home health care. Additionally, he or she could periodically assess the need for home health care.

- **Nursing assistance**

The most typical kind of home health care is nursing care, which varies based on the needs of the individual. A registered nurse will draught a care plan alongside the doctor. Wound treatment, ostomy care, intravenous therapy, medication administration, patient monitoring, pain management, and other types of medical assistance are a few examples of nursing care. speak clearly if they have lost it.

- **Home health aides**

The fundamental personal requirements of patients, such as getting out of bed, moving about, having a shower, and dressing themselves, can be assisted by home health aides. Under the direction of a nurse, some assistants have acquired further training to assist with more specialized care.

- **Companionship**

Some patients may need the company and supervision of a companion if they are alone at home. Some friends could also lend a hand around the house. A homemaker or someone who helps with tasks or obligations can maintain the house in order while a patient is receiving medical care at home by cooking, doing washing, going food shopping, and other housekeeping chores.

1.2 Global Home healthcare needs

The elderly in India (those over the age of 60) are expected to grow faster than the overall population, from 8% of the total population in 2015 to 19% by 2050. The increasing prevalence of chronic diseases because of this is one of the significant factors. On the other hand, the demand for post-operative careis being fueled by affordability and awareness. The need for home care is increasing for a number of

reasons, including high levels of stress and a lack of work-life balance. As a result of the responsibility of caring for the elderly or chronically ill, informal support networks are breaking down in today's nuclear family system. The elder generation is forced into social isolation, which causes depression and loneliness since children are unable to spend quality time with their parents. In its current state, home healthcare includes diagnostics, the rental of treatment and monitoring devices, home medical consulting services, mobility aids, medical supplies, and telemedicine.

Children's failure to have meaningful interactions with their parents forces the older generation into social isolation, which leads to despair and loneliness. Home healthcare as it stands now consists of diagnostics, the rental of medical equipment for treatment and monitoring, home medical consultation services, mobility aids, medical supplies, and telemedicine.

1.3 Impact of covid in home healthcare services

Loss of autonomy results after hospitalization. You might be able to keep your confidence by choosing when to eat, get out of bed, and go to sleep. Patients without COVID are able to interact socially and even travel with supervision. Interaction with family and friends helps to maintain mental health. During the pandemic, it helps to reduce the need for hospitalization. Under the direction of a doctor, hospital staff members such as nurses, physical therapists, occupational therapists, speech therapists, social workers, and assistants treat non-COVID patients. Family members may prevent the burnout that comes with patient care with the help of home health aides. When choosing a home healthcare provider, specialist services are an important factor. Top of the list are nurse care, palliative care, geriatric care, and post-surgery care. The focus is on expert packages that include advanced tracheostomy care, pediatric nursing, and counselling. The Indian health industry is experiencing the biggest increase in medical home care, which includes teleconsultation, in-home lab testing, and home medicine delivery. The demand for home-based immunizations, particularly for youngsters, is anticipated to rise if the current age restrictions are abolished.

More people are opting for remote therapy. A 2020 RedSeer Analysis research goes into detail about the many variables driving the growth of this industry. India now has nine beds per 10,000 patients, which is much less than the minimum of 40 beds and one nurse per 1,000 patients that the WHO mandates. Because of this, individuals with special needs are receiving far less specialized care. Since 25% of patients in India have been demonstrated to be vulnerable to "hospital-acquired infection," the research claims that going to a hospital increases the chance of catching infectious diseases. . Intensive care might cost anything between Rs 35,000 and Rs 50,000 per day. These characteristics make home-based therapy an enticing alternative to hospitalization, barring life-threatening circumstances. A increasing need for high-quality post-operative care, improvements in remotely operated technology, an ageing population, more disposable money, and the expansion of chronic and lifestyle ailments are all factors contributing to this industry's explosive growth in India. The app connects patients with physicians by analyzing their diseases and recommending lifestyle changes outside of the

predetermined 10–15-minute session. By serving as a digital extension of their practice, apps assist doctors in providing better treatment to patients outside of the clinic. Home healthcare is more convenient for those with non-communicable diseases who need a steady supply of medications and regular diagnostic tests. Patients with non-communicable illnesses, who require a constant supply of drugs and frequent diagnostics, found home healthcare to be a benefit during the epidemic.

1.4 Purpose of research

The consumer, after all, is the one who determines whether a service is of high or low quality. However, there are numerous challenges in healthcare that may impede individuals from having a thorough perspective of quality, including poor knowledge of technical aspects of medical processes, diagnosis, and treatment, among other things. At the same time, the quality of the healthcare service provided is heavily reliant on the participation and compliance of the patients. As a result, consumers find it difficult to assess quality due to a lack of information and active participation of patients in the service delivery process. As a result, it is possible that health service providers' perceptions of healthcare service quality may augment overall perceptions of healthcare service quality, while consumers' perceptions of healthcare service quality should be a main point.

Patient satisfaction is one of the most significant aspects of quality, which reflects the quality of services provided in a hospital setting. Patients' perceptions of "how well" services satisfy their needs and expectations are characterized as patient satisfaction, which is also used as a legitimate indicator of service quality. Patient satisfaction has been used to assess care receivers' opinions of the quality of health services and their willingness to pay for or use such services delivered in healthcare facilities since the 1990s.

1.5 Problem being investigated

- To examine the problems that India faces in terms of home healthcare.
- Examine the potential development areas for home care in the Indian scenario.
- Examine that the workforce is willing to adhere to all terms and maintain patient satisfaction while the services are operational.
- Examine that the personnel is meeting all the expectations as expected with the patients.
- Verify that the medical needs of the patients are fulfilled.
- Identifying the gaps of home healthcare services.

1.6 Servqual model and healthcare service

In recent study, the SERVQUAL model and the health service quality scale were the two main models utilized to measure service quality. Applying physical quality measurement skills to the service industry has proven difficult due to the unique qualities of service. For starters, because service is intangible, it cannot be shown, proved, or depicted in any physical way. Second, it's impossible to standardize service. However, the level of demand has an impact on service performance. Third, customers actively participate in the provision of services. After finding five significant gaps in the service quality idea,

Parasuraman developed a customer's perspective on service quality based on a gap model. Using this methodology, the SERVQUAL questionnaire was produced.

The SERVQUAL model of Parasuraman (1985) is widely used as a conceptual framework for analyzing and monitoring service quality delivery in healthcare services. Customers' views of quality are influenced by FIVE distinct gaps. The following are the gaps:

1. Uncertainty about the patient's expectations id., the gap between the patient's expectations and the management's perceptions of those expectations.
2. Inadequate service quality standards, i.e., the gap between what the "management perception of patients" expects and what the service quality specification specifies.
3. Service quality gaps, i.e., the gap between the service quality specification and the actual service offered.
4. The disparity between how services are delivered and how they are presented to patients.
5. The disparity between patients' expectations and perceptions, which is proportional to the magnitude and direction of the four gaps in service quality delivery on the service provider's side.

1.7 Importance of the problem

Because India is the world's second most populous country, the need for medical care and services will continue to rise. According to WHO the prescribed patient doctor ratio is 1:1000, that is one doctor for a population of 1000 individuals. The population of India is 1,380 million people. According to the most recent data from the Ministry of Health in 2019, we have a total active population of 1.16 million doctors, with only 0.8 million practicing. As a result, we have a ratio of 0.68 doctors per 1000 people, which is much below the WHO's recommended level. According to data, India needs an additional 4.3 lakh physicians in order to satisfy WHO guidelines. In addition to that, it would be naive to think that roads will be expanded sufficiently to prevent traffic congestion or that access to a hospital billing counter with no lines will be available soon. Considering these factors, it's reasonable to predict that the need for home healthcare will rise in the next years. In the next thirty years, the number of senior persons is expected to climb thrice. This will necessitate further in medical attention and care than is currently required. Furthermore, the growing number of persons suffering from chronic conditions like as cancer, renal failure, Alzheimer's disease, and others will greatly benefit from this module of healthcare service and will be able to live a more self-reliant, independent, and dignified life as a result.

1.8 Aims and Objectives of the study

Safety for patients is crucial. Patient safety is particularly at risk at home. Infection control, sanitation, and physical layout are a few examples of environmental hazards. Other examples include problems with caregiver communications and handoffs, a lack of patient and family caregiver education and training, the challenge of balancing patient autonomy and risk, the various needs of patients receiving home-based care, and a lack of continuous health monitoring.

It's crucial to carefully assess and manage these risks when providing care in the home. There should be clear inclusion and exclusion criteria so that the suitability of a home-based solution can be evaluated. Every patient interaction must take safety into account while designing the medical devices and supplies used at home, building the platforms for home-based care teams to communicate, and educating patients, family caregivers, and home-based care professionals.

The study's objectives are to determine the difference between patients' expectations and perceptions of the quality of the services they get, as well as to pinpoint any areas where service delivery might be enhanced to improve patients' perceptions of their experience receiving home healthcare.

1.9 Servqual: A Tool For Measuring Service Quality:

The Servqual model is a method for recording and measuring the quality of services that consumers have received. It is a service quality model developed and executed by American marketing experts Parasuraman, Berry, and Zeithaml in 1988. The RATER model (Reliability, Assurance, Tangibles, Empathy, and Responsiveness) is another name for the Servqual model, which consists of five aspects connected to service that are assessed by it: reliability, assurance, tangibles, empathy, and responsiveness. Businesses utilise this approach to conduct a gap analysis of the service quality they provide vs the quality demands of their clients.

The Servqual concept aids companies in managing their operations and giving customers higher-quality services. Customer satisfaction is at its highest and the quality status is excellent when a service performs better than anticipated. This methodology was first designed exclusively for companies that offer services since service industries are more interested in monitoring service quality.

The specific qualities of services, such as their intangibility and variety, served as the inspiration for the development of this paradigm. Businesses were unable to provide services with the same level of quality as producers of physical goods due to the availability of such characteristics. The specific qualities of services, such as their intangibility and variety, served as the inspiration for the development of this paradigm. Businesses were unable to provide services with the same level of quality as producers of physical goods due to the availability of such characteristics.

R-A-T-E-R is the acronym for Servqual's five essential aspects, which are detailed below: –

1. **R= Reliability:** A company's reliability may be determined by how consistently and accurately it fulfils its commitments. The dependability element of the Servqual model attests to the capability to provide services precisely, promptly, and persuasively. Providing clients with prompt assistance or goods in error-free circumstances requires consistency. You must keep your promise to deliver your service on time and accurately as you said. For instance, the business consistently sends letters to customers on time. This component of service quality has to do with the ability to provide services in a reliable and consistent manner. Reliability, according to Garvin (1987), "always tends to show up in the appraisal of service." When it comes to service dimensions, according to Parasuraman (1988), dependability is usually the

most significant feature clients desire. He also claimed that converting negative to positive wordings, as recommended by Babakus and Boller (1991), improved the dimension's accuracy. Walker (1995) discovered that if the fundamental level of service is adequately delivered, the peripheral performance enables the consumer to see the service delivery as satisfactory.

2. **A= Assurance:** The term "assurance" describes an employee's competence to do so through their professionalism, experience, and ability to do so. Assurance increases credibility and customer trust. Considerations include technical proficiency, practical communication skills, politeness, believability, competence, and professionalism. Assurance: The dimension of assurance involves the staff's professionalism and courtesy, which foster patients' trust and confidence and so establish the assurance quality. Parasuraman et al. listed actions by workers such as polite behavior, establishing confidence, and expertise as important parts of the assurance service dimension (1998). In their research for measuring service quality, Zeithmal et al (1998) substituted assurance with competency, credibility, politeness, and security.
3. **T=Tangibility:** The physical qualities of health-care facilities are included in the tangibility dimension. It include the structure, equipment, personnel appearance, and communication technologies utilized with patients. Bitner developed a conceptual framework to investigate the influence of physical surroundings on patients and workers (1992). Bitner's research also showed that a patient's physical appearance had a significant impact on their degree of happiness. Berry and Clark's research validated the impact of physical appearance on service quality (1992). In Zeithmal et allater .'s versions of the SERVQUAL model, the physical service dimension was never changed (1998).
4. **E= Empathy:** Empathy is concerned with the amount to which clients are given with caring and personalized service. > Empathy: The kind of care and individualised attention provided by the organisation to its patients is the final component of empathy. In the study of Parasuraman et al. (1998), the degree to which the customer feels empathetic determines whether the customer accepts or rejects the service encounter. In the work of Zeithmal et al., the empathy service dimension was replaced by access, communication, and understanding of the customer (1998) ,
5. **R= Responsiveness:** Responsiveness refers to a company's readiness to help consumers and provide timely service. Responsiveness: This factor of service quality relates to an organization's personnel' desire or eagerness to serve patients and provide quick service. According to Parasuraman (1998), responsiveness refers to the precise amount of time it takes to provide prompt services to a patient, as well as how soon the patient's demands are met. Due to its lack of dependability, Bahia and Nantel (2001) ignored this dimension in their investigation, but they considered the other SERVQUAL model components to be standardised for their findings and results. This was also one of the initial dimensions of the Zeithmal et al. research that was not changed (1998)

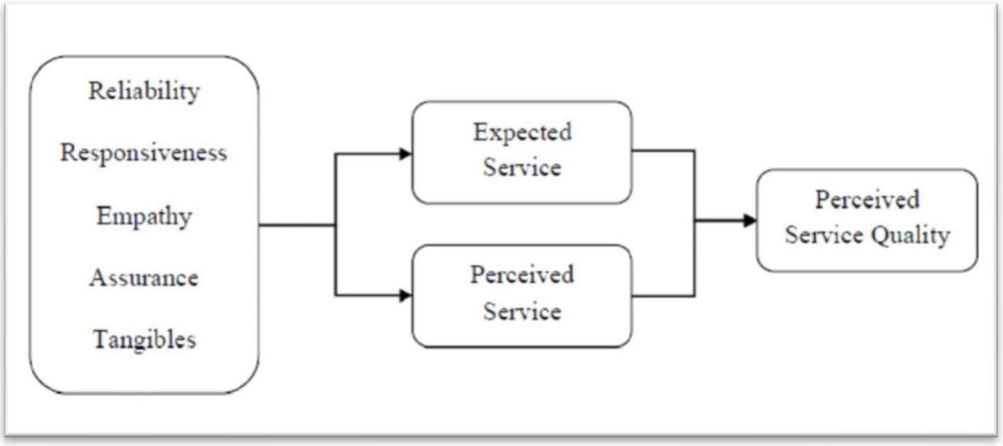

Figure 1. Servqual Model

1.10 The Servqual Gap

Communication and internal communication impact the quality of services provided by businesses to a large extent. Customers' expectations must be known by businesses for them to execute efficiently. The Servqual model identifies five gaps that occur between the services provided and the demands of clients, as follows: –

- **Knowledge Gap:** A knowledge gap occurs when an organization's perceptions of what customers expect from them are incorrect. There are discrepancies between consumer requirements and management's perceptions of customer expectations. This gap arises because of a lack of suitable customer or market focus, which prevents businesses from reaching customers effectively. A good set of market analysis tools, mindset, and management approach are all required for optimal market focus.
- **Standard Gap:** When a corporation sets its own standards for its customers, it creates a standard gap. If this notion fails from the outset, there is a danger that the firm will be unable to properly adapt to client requirements. Customers' expectations may not be translated into service quality criteria by management.
- **Delivery Gap:** is caused by a mismatch between the service provided by the organization and the service expected by the client. There are occasions when the actual service offered by front-line workers differs from the delivery requirements required by management. There are a variety of causes for these conditions, including process issues, frontline employee performance unpredictability, and a lack of frontline staff cooperation.
- **Communication Gap:** When there are disparities between what a company claims to give and what they really supply to their clients in the form of services, it is known as a communication gap. When a company communicates and promises things that aren't in accordance with their real offers, a market communication gap occurs.

- **Satisfaction Gap:** The satisfaction gap is caused by a mixture of the other four gaps that emerge when a firm delivers services. A satisfaction gap exists when a customer's expectations diverge from what he or she receives. This is the most significant discrepancy in service quality.

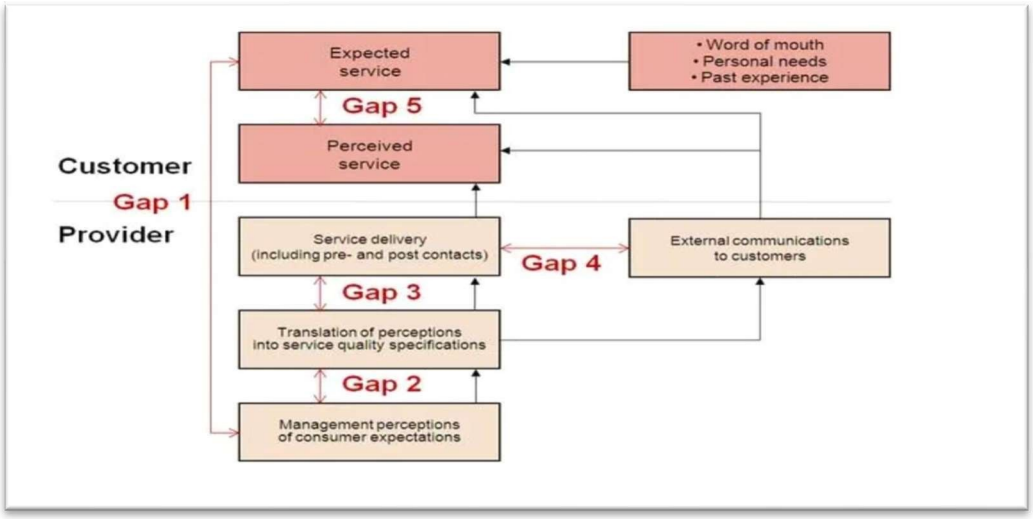

Figure 2. The Servqual gaps, gap model of service quality

Each question appears twice in the SERVQUAL model. One assesses the individual's expectations for service delivery from the healthcare organization, while the other assesses their perceived degree of service delivery. The twenty-two question sets are tailored to the five elements of service quality: tangibility, dependability, responsiveness, assurance, and empathy. The assertions were measured using a five-point Likert scale: "strongly disagree" (1), "disagree" (2), "neutral" (3), "agree" (4), and "strongly agree" (5)." (5). "Strongly agree" is at the top of the scale "It is associated with a high level of perception and anticipation.

When the levels of perceptions meet the levels of expectations, it is claimed that service excellence has occurred. A gap is said to exist when the expectations level is higher than the perception level. When there is a negative gap, it signifies that the expected level of service is lower than the perceived level of service. A good gap score shows that the level of service delivery expectation meets the level of service delivery perception. Each statement's gap score is computed by subtracting the expected and perceived score for that sentence. By aggregating the individual statement gap scores, the total gap score for each dimension may be determined.

The SERVQUAL model can be used for the following reasons, according to (Accounts Commission of Scotland, 1999, Parasuraman 1985, 1988).

- Evaluating the success of several client groups
- Comparing and contrasting performance across several service quality dimensions
- Understanding the organization's various customers
- Identifying the organization's present service quality

- ‘Scope of quality improvement programs

Studies using the SERVQUAL model have been conducted in the healthcare industry to evaluate patients' perceptions of the services they received in a variety of categories, including patient satisfaction (Bowers et al., 1994), acute care hospitals (Carman, 1990), independent dental offices (McAlexander et al., 1994), AIDS service agencies (Fusilier and Simpson 1995), and public university health services (Anderson 1994). The model demonstrates reliability and may be used as a benchmark to assess many facets of service quality dimension. The concept has demonstrated validity across a number of service areas. According to this model, the service quality is a function of the difference of the expectations and the perception of the customers.

Service quality = Perception of service delivered – Expectations from the service delivery for home

CHAPTER 2: LITERATURE REVIEW

S. No.	Author	Objective	Study Location	Methodology	Salient Features
1.	C. H. Ko, C. M. Chou, 2020	Apply the SERVQUAL Instrument to Measure Service Quality for the Adaptation of ICT Technologies: A Case Study of Nursing Homes in Taiwan	Taiwan	A case study	The SERVQUAL questionnaire is a simple to use, multifaceted, and comprehensive instrument for assessing subjective emotions. It is also well-known for its conception and evaluation of service quality.
2.	K. S. Datta, J. Vardhan 2017	A SERVQUAL-Based Framework for Assessing Quality of International Branch Campuses in UAE	UAE	Random sampling, questionnaire survey	For the same, there is a SERVQUAL model. The study examines service standards across seven branch campuses for the five characteristics of service quality (Responsiveness, Assurance, Tangibility, Empathy, and Reliability) and reveals the difference between perception and expectation. The findings will aid institutions in focusing on quality dimensions in order to develop an action plan for overall service quality improvement.
3.	(Parasuraman, Zeithaml, & Berry, 1988).	The service-quality puzzle			Customers are asked to answer questions about their expectations and views, as well as assign a numerical weight to each of the five service quality characteristics, using the SERVQUAL customer perception instrument.
4.	Sweta Dcunha,	The Measurement of Service Quality in Healthcare: A		Random sampling	The consumer is looking for quality. In other words, client satisfaction is

	Sucharitha Suresh, 2015	Study in a Selected Hospital		technique was adopted to select a sample of 100 patients who were admitted for more than two days.	measured by quality. Because consumers are the ultimate judges of service quality, customer-focused quality management is one of the most crucial aspects of successful organizations. Patient satisfaction is favorably influenced by patient perceptions of service quality in the healthcare business. Dissatisfaction occurs when expectations and perceptions of quality features and outcomes differ. Patients are happy when service delivery meets their expectations.
5.	Sharma, S. (2016).	Using SERVQUAL to Assess the Customer Satisfaction Level: A Study of an Urban Cooperative Bank			Focus on any performance gaps that exist, since this will allow management to prescribe and implement measures to close these gaps, so improving the bank's service quality and establishing a more positive customer view.
6.	M. A. Hewitt, D. G. Smith, J. T. Heckman, P. F. Pasquina	COVID-19: A catalyst for change in virtual health care utilization for persons with limb loss		Case study	The COVID-19 pandemic has sparked breakthroughs in virtual care, which may be used in a variety of medical settings, including rehabilitation. We think that, when utilized properly, telehealth has the potential to significantly enhance access to treatment, patient involvement, and overall outcomes.
7.	Rajiv Sikka, 2021	Transformation of the patient journey in a virtual healthcare setup in the	Medanta		Patients' fears about infection Hospitals having a high COVID-19 risk must be quarantined. Care is available during the COVID-19 quarantine. The patient's location has changed. There is a gap between

		new normal			high demand and doctors' capacity to provide healthcare demands at the present rate of treatment. Distancing amongst healthcare workers on a social level.
8.	Mohebifar, R., Hasani, H., Barikani, A., & Rafiei, S. (2016).	Evaluating Service Quality from Patients' Perceptions: Application of Importance–performance Analysis Method			Healthcare executives must have a deep awareness of practical approaches to improve care quality. In such situations, hospital executives focus their efforts on acquiring as many patients as possible and cultivating loyal customers by understanding their needs and attempting to meet them effectively.
9.	Liu, L., & Fang, J. (2019).	Study On Potential Factors Of Patient Satisfaction: Based On Exploratory Factor Analysis	Urban Hospitals	QUESTIONNAIRE	There are several components to patient happiness, as well as numerous contributing factors. Patient satisfaction is divided into sub-aspects such as the visiting atmosphere, medical expenditures, service attitude, medical technology, and medical facilities, among others. Patient satisfaction is influenced mostly by fundamental demographic and socioeconomic parameters.

Table 1 Literature review

CHAPTER 3: METHOLOGY

The SERVQUAL customer perception tool was employed in the current investigation. In order to determine and evaluate the degree to which the services offered by the organization under study meet quality standards or customer expectations, as well as to pinpoint areas where service delivery could be improved, leading to improved customer perception, this tool was used with home healthcare clients, patients, and families. following the dissemination of the conditions and conclusion of portal registration. Customers' expectations of the services offered were gauged by the first set of questions, while perceptions of the company's actual services were determined by the second set. They are given this list of questions before the services start, and after one to two weeks, feedback is gathered from them to gauge their progress These questions are sent to them prior to the start of the services, and one to two weeks later, feedback is gathered from them to gauge their opinions on the company's offerings.

3.1 Mode of Data Collection

The "anticipation" set of questions in the first set of the questionnaire was used to determine the level of expectation for a service delivery. It was completed by patients when their family members called our CRM department to request home healthcare services. They should make a list of the needs and set aside time to find an appropriate caregiver profile. These patients were asked about their expectations in the questionnaire before the services began and after they registered on the platform. When the caregiver or nurse arrives at the place and the client begins to use the services, the other set of the questionnaire, the perception set, is completed. The study took place over two months, from March 21st to June 20th, 2022. The study covered minimum 100 home healthcare patients from elderly care to severity of the disease conditions.

3.2 Study Design

Qualitative and observational study

3.3 Sampling Technique

Convenient sampling

3.4 Sampling Procedure

100 patients receiving home healthcare services from the company made up the research sample. 20 questions were included in a standard set of questionnaires that we used, and we changed them to fit the 5 service aspects of the services under investigation. The two sets of surveys that required to be completed before the start of the services and shortly after registration were fully explained to the respondents.

'Two sets of questions were developed using a literature study. The questionnaire was standardized based on a small sized pilot test study with 100 participants. The final questionnaire was constructed using identical statements from the service quality component. The tangibility dimension had five questions, the reliability dimension had five, the responsiveness dimension had three, and the assurance and empathy dimensions had four and three questions, respectively. There were a total of 20 question-and-answer combinations. Patients are asked to rate how vital it is for home healthcare services to have the features listed in each statement from the caretakers, nurses, teleconsultations, and so on in one set of questions. The other set of questions focuses on their perceptions of the value of the services they receive for the money they pay. The value and advantages of home healthcare services are described in the statement.

The term "should" is used in the patient expectation questionnaire to convey the level of anticipation for each criterion. A five-point Likert scale was used to assess the level of expectation and perception associated with each service quality component. The SERVQUAL characteristics tested were Very Bad (1), Bad (2), Average (3), Good (4), and Very Good (5).

3.5 Sample Size

All responders interested in home healthcare services for a variety of reasons are chosen at random. The respondents are both active and inactive, and everyone took part in the survey. The responses of 100 people have been recorded, and they are all active home healthcare patients or family members of critical patients.

3.6. Inclusion Criteria

Participants in the research had to be at least 18 years old and have been receiving home healthcare services for at least 24 hours to genuinely convey their feelings about the quality of treatment. Family members or the family's decision maker also had an active part as a respondent. If the patient is in a serious state and unable to provide input, the members are the ones who respond on their behalf.

3.7 Data Collection Tool

A standard SERVQUAL questionnaire established by Parasuraman and Zeithaml [6] in 1985 was used to collect data. The questionnaire included a 20-item "expectation" portion and a set of corresponding statements in the "perception" section. The statements were divided into five dimensions: tangibility, dependability, responsiveness, assurance, and empathy in both the

expectation and perception portions. The grading system was based on a 5-point Likert scale, with 1 indicating "strongly disagree" and 5 representing "strongly agree."

3.8 Data Analysis

Step 1: Select a bank whose customer service you want to rate. Utilize the SERVQUAL tool to determine the results for each of the 20 expectation questions. Create a core for each of the perceptual questions after that. Determine the Gap Score for each statement (Gap Score = Perception - Expectation).

Step 2: Add the Gap Scores for each of the statements that make up each dimension, then divide the amount by the number of statements. This yields the average Gap Score for each dimension.

Step 3: From the SERVQUAL instrument, average dimension SERVQUAL scores (for all five dimensions). To get an unweighted metric of service quality, add together the scores and divide by five.

Step-By-Step Guide To Getting A Weighted Servqual Score

Step 1: For each of the five dimensions of the SERVQUAL scale, determine the importance weights.

Step 2: For each dimension, enter the average SERVQUAL score as well as the significance weight. Then multiply each dimension's average score by its significance weight.

Step 3: To get the total weighted SERVQUAL score, add the weighted SERVQUAL scores for each dimension.

CHAPTER 4: RESULTS

The questionnaire was gathered between March 21 and June 20 of 2022, and the score of 100 responses was calculated after that. The average impression score and expectation score for all 100 respondents were calculated for each of the five service components. The perception (P) and expectation (E) method was used to determine the gap score for each statement, and the average gap score for each dimension was obtained for all 100 respondents. The average important weight score for each of the five service characteristics was calculated. The significant weight of each service dimension was multiplied by the unweighted service dimension score to get the weighted score.

4.1 Demographic Details

Demographic details of the respondents are as follows:

Age (In years)	Number	Percentage
21 to 30	12	12%
31 to 40	1	1%
41 to 50	1	1%
51 to 60	5	5%
61 to 70	34	34%
71 to 80	31	31%
81 to 90	14	14%
91 to 100	1	1%
101 to 110	1	1%
Total	100	100%

Table 2. Age wise demographic details of the respondents

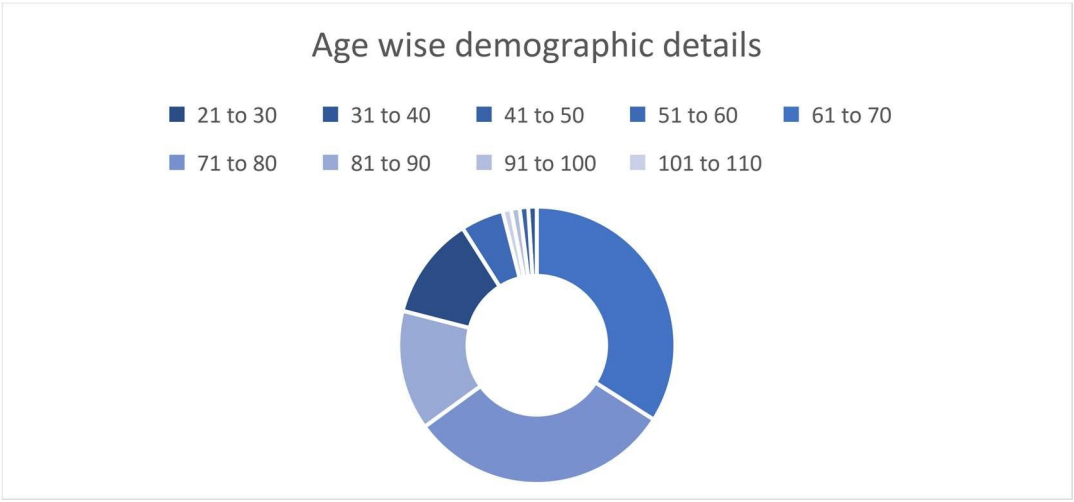

Figure 3. Age wise demographic details of the respondents

Out of 100 respondents' highest percentage that is 34% of people lies in the age group of 61 to 70 years, 31% are from the age group of 71 to 80 years. The age group of 81 to 90 years have 14% of respondents. Age groups less than 60 are approximately 19% of the total respondents. The rest of the age groups above 90 years are very less.

4.1.1 Diagnosis (reason to opt services)

Diagnosis	Number	Percentage
Alzheimer	1	1%
Angioplasty done	1	1%
Arthritis	2	2%
Asthma	1	1%
Bone cancer	1	1%
Brain hemorrhage	2	2%
Brain tumor	1	1%
Breast cancer	2	2%
Cardiac arrest	1	1%
CKD	3	3%
Dementia	6	6%
Diabetes	9	9%
Elder care	26	26%
Fracture	2	2%
Gall bladder surgery	3	3%
Heart failure	5	5%
Hip fracture	1	1%
Hip surgery	1	1%
HTN	1	1%
Hydrocephalus	2	2%
Lag amputated	2	2%
Liver cirrhosis	2	2%
Ovarian cancer	1	1%
Paralysis	5	5%
Parkinson	2	2%
Post covid	1	1%
Pulmonary edema	1	1%

Rectal cancer	1	1%
Spinal cord injury	1	1%
Stroke	9	9%
TKR	2	2%
CVA	1	1%
Pleural effusion	1	1%
Total	100	100%

Table 3. Diagnosis of the home healthcare patients

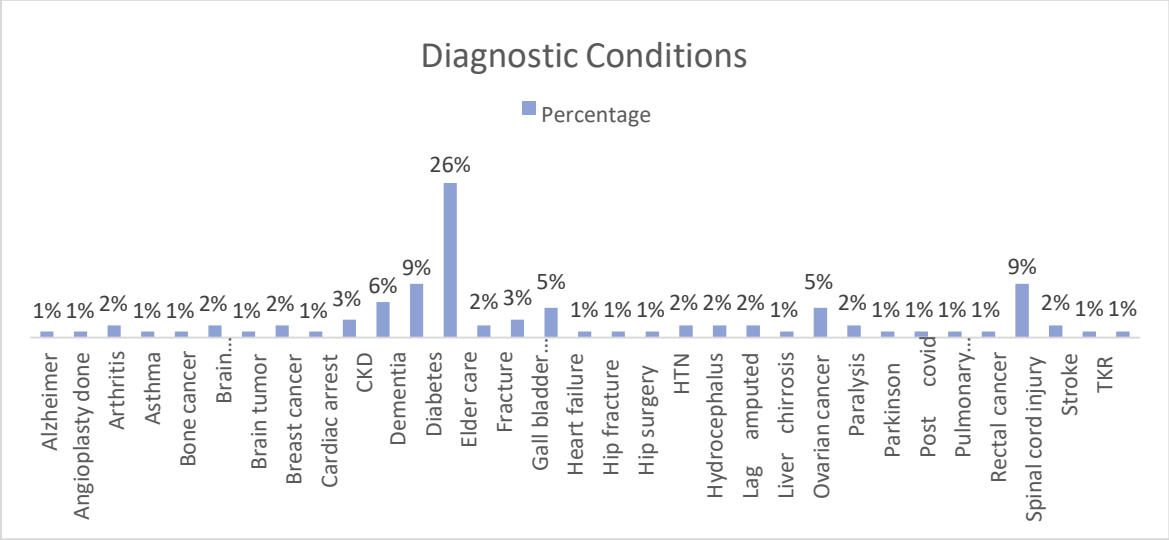

Figure 4. Diagnosis of home healthcare patients

It was found that maximum number of patients elderly care 26% and the other conditions are diabetes 9%, dementia, stroke, heart failure 6%, 6% and 5% respectively. Other mentioned conditions are minimum number of respondents opted for home healthcare services. From this table we can also see the most common health conditions are the reason to opt for home health care services, where people will rather prefer home healthcare rather than hospital admissions which is comparatively economic as compared to other.

4.1.2 Average length of stay:

Average Length of stay	Number	Percentage
1 to 30 days	23	23%
31 to 60 days	17	17%
61 to 90 days	24	24%
91 to 120 days	9	9%
121 to 150 days	5	5%

151 to 180 days	6	6%
181 to 210 days	6	6%
211 to 240 days	2	2%
241 to 270 days	2	2%
>270 days	6	6%
Total	100	100%

Table 4. Average length of stay in days of active patients

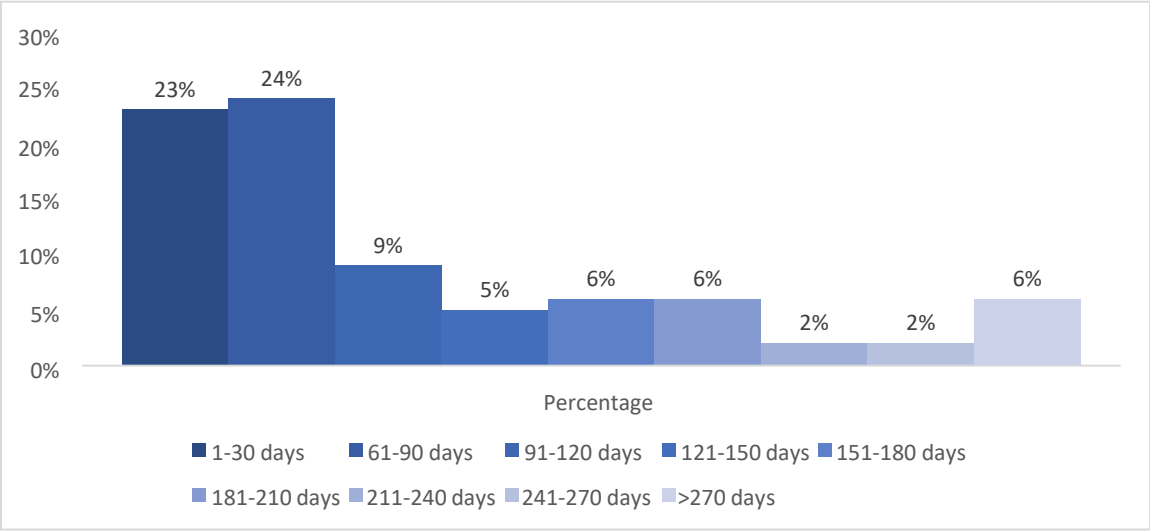

Figure 5. Average length of stay in days of active patients

The average duration of stay for the 46 percent of responders was between 61 and 90 days, which is more than 2 months continuing to take the home health care services. These are the responders who are actively continuing to provide services and have not yet stopped doing so. 6% of those who responded have been using our services for more than 240 days. They have given positive feedback and believe that the individual has become a member of their family.

4.1.3 Demographics based on location:

Locations	**Numbers**	**Percentage**
Agra	1	1%
Allahabad	1	1%
Anantapur	1	1%
Aurangabad	1	1%
Beed	1	1%
Bengaluru	4	4%
Bharuch	1	1%
Bhatinda	1	1%
Bhopal	1	1%
Chandigarh	2	2%
Chennai	2	2%
Delhi	13	13%
Faridabad	1	1%
Fatehabad	1	1%
Ghaziabad	1	1%
Greater Noida	4	4%

Gurgaon	7	7%
Haldwani	1	1%
Hyderabad	8	8%
Indore	1	1%
Jaipur	3	3%
Jalandhar	4	4%
Jamshedpur	1	1%
Jodhpur	2	2%
Kaithal	1	1%
Kolkatta	1	1%
Kota	1	1%
Lucknow	4	4%
Mathura	1	1%
Medak	1	1%
Moga	1	1%

Mumbai	2	2%
Nagpur	1	1%
Panipat	1	1%
Prayagraj	1	1%
Pune	5	5%
Rewari	1	1%
Saharanpur	2	2%
Sangrur	1	1%
Surat	1	1%
Yamuna Nagar	1	1%
Zirakpur	1	1%
Others	10	10%
Total	100	100%

Table 5. Geographic location details of the respondents

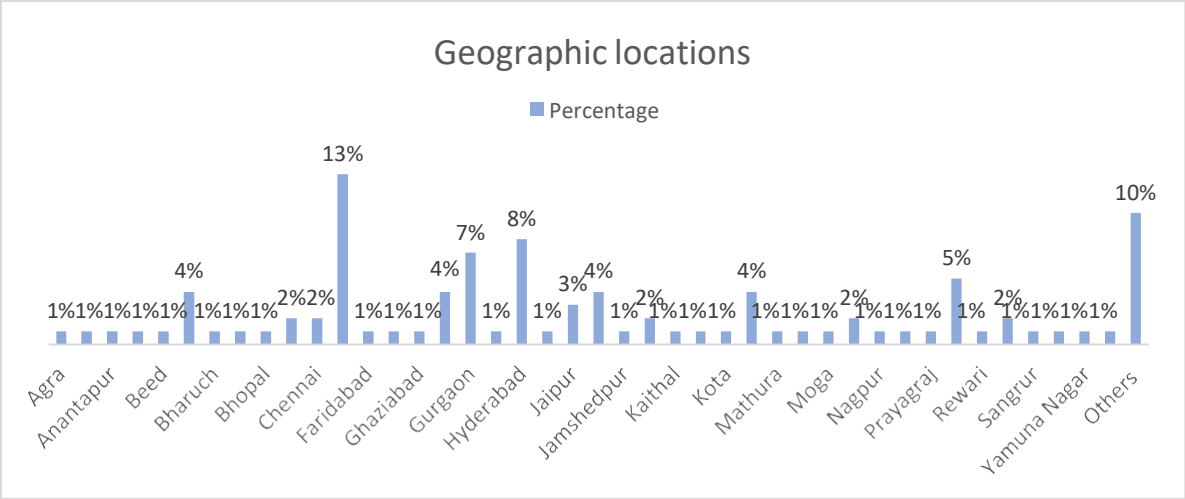

Figure 6. Geographic location details of the respondents

4.2 Importance Weightage Score:

While all of the service dimensions are claimed to be crucial in assessing service quality, the survey participants revealed a wide range of preferences when it came to prioritizing the service aspects. The participants were asked to rank and weigh the various aspects of service quality in such a way that the total adds up to 100. When the "expectation" set of questionnaires was

presented to each respondent at the time of admission into the ward, the notion of importance weight for service quality was communicated to them.

The following ranking was generated after collecting data on significance weight from 100 respondents:

Service Dimension	Average Importance Score
Tangibility	14
Reliability	20
Responsiveness	20
Assurance	22
Empathy	24
TOTAL	100

Table 6. Importance weightage score of all 5 dimensions

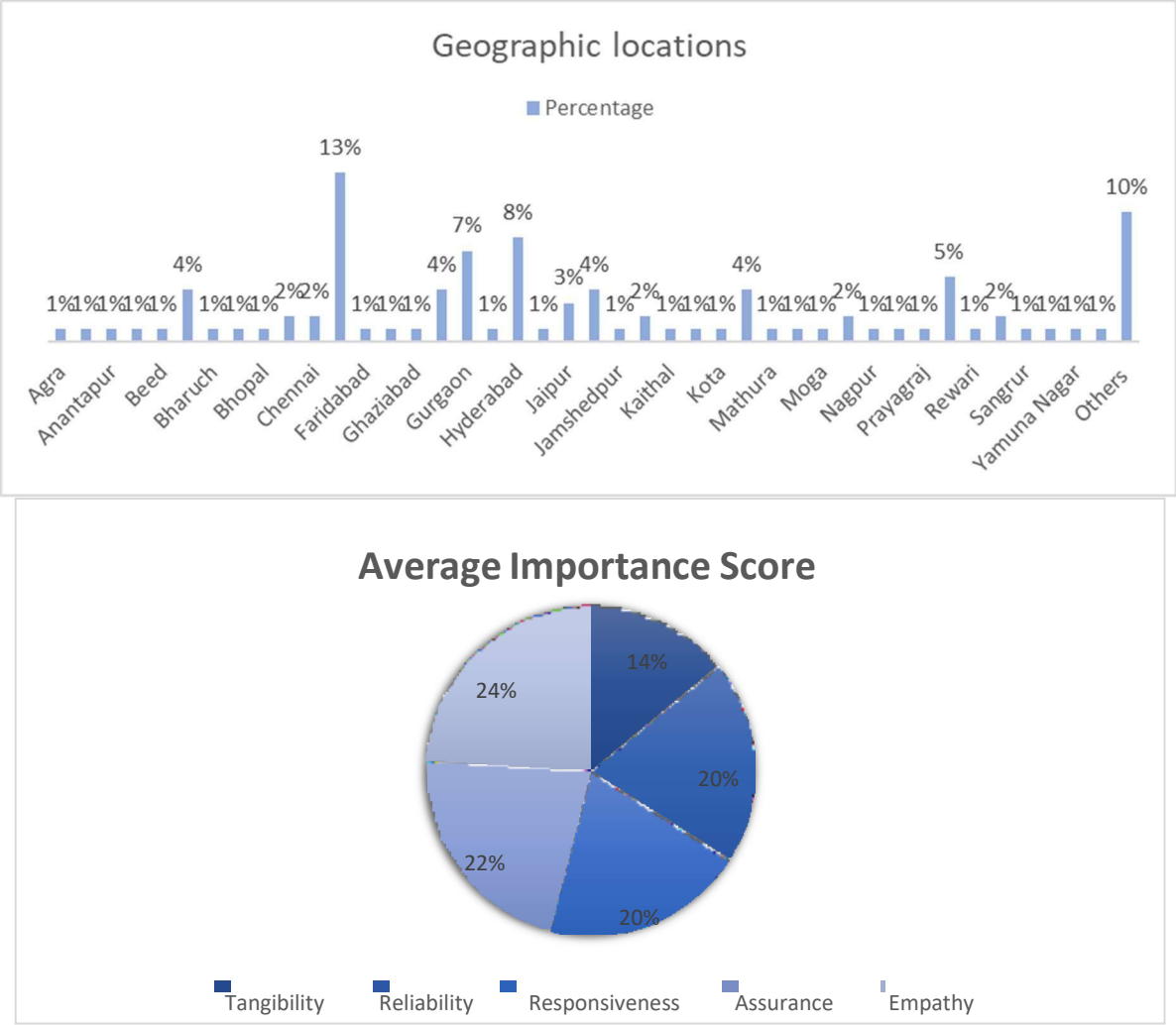

Figure 7. Importance weightage score of all 5 dimensions

The average importance score which is highest that is 24% to empathy dimension , followed by 22% for assurance. Then comes the dimension of reliability and responsiveness 20% each. The dimension of tangibility was found to be the least importance weightage score which is 14% out of the overall importance weightage of 100%.

4.3 Servqual Results-

4.3.1 The Tangibility Dimension

The first five of the 20 questions on the tangibility dimension gauge respondents' impressions of the tangible qualities of home healthcare. The difference score is negative. Customers' expectations are greater than their perceptions, implying that their expectations are higher than their perceptions. in these areas. The gap score in the other two areas of facilities and staff is positive, indicating that the clients' perceptions of these sites are higher than their expectations. The average unweighted gap score in the tangibility component of customer pleasure is -0.12. When the dimension weight of 14 is considered, the weighted gap score drops to -1.74, as seen in the histogram below. In both cases, the survey results reveal that respondents' impressions of the physical aesthetic components of home healthcare services exceed their expectations. SERVQUAL's average perception for the tangibility dimension is 4.21.

Dimension	Code	Average Perception Score	Average Expectation Score	Gap score	Average Percepition Servqual score
Tangibility	T1	4.32	4.34	-0.02	4.21
	T2	4.17	4.30	-0.12	
	T3	4.17	4.34	-0.17	
	T4	4.16	4.33	-0.17	
	T5	4.21	4.36	-0.14	

Dimension weight	14
Average Unweighted Tangibility gap score	-0.12
Weighted Tangibility gap score	-1.74

Table 7. Servqual results - Tangibility dimension

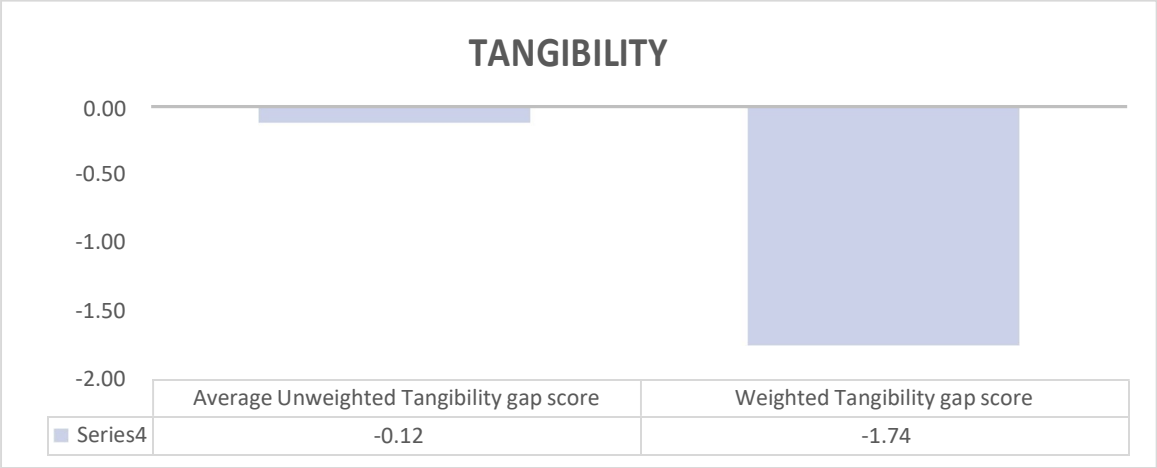

Figure 8. Tangibility dimension- Unweighted and weighted gap score

4.3.2 The Reliability Dimension

The next five of the 20 questions on the reliability dimension are used to find out how respondents feel about the actual characteristics of home healthcare. The score for the difference is zero. Customers' expectations are higher than their perceptions, which suggests that customers have higher expectations. these regions The positive gap score in the other two categories—facilities and staff—indicates that customers have higher expectations of these locations than they actually do. The reliability component of customer satisfaction has an average unweighted gap score of -0.20. The weighted gap score increases to -4.03 when the dimension weight of 20 is included, as seen in the histogram below. The study results show that respondents' perceptions of the physical aesthetic elements of home healthcare services surpass their expectations in both situations. The reliability dimension's average SERVQUAL impression score is 4.16.

Dimension	Code	Average Perception Score	Average Expectation Score	Gap score	Average Percepition Servqual score
Reliability	RL1	4.13	4.41	-0.28	4.16
	RL2	4.17	4.41	-0.24	
	RL3	4.18	4.33	-0.14	
	RL4	4.14	4.36	-0.21	
	RL5	4.17	4.30	-0.13	

Dimension weight	20

Average Unweighted Tangibility gap score	-0.20
Weighted Tangibility gap score	-4.03

Table 8. Servqual results – Reliability dimension

Figure 9. Reliability dimension- Unweighted and weighted gap score

4.3.3 The Responsiveness Dimension

The three questions on the responsiveness dimension, out of a total of 20, assess respondents' impressions of the tangible qualities of home healthcare. The difference score is negative. Customers' expectations are greater than their perceptions, implying that their expectations are higher than their perceptions. The gap score in the other two subcategories of facilities and staff is strong in these places, showing that clients' perceptions of these sites surpass their expectations. The responsiveness component of customer satisfaction has an average unweighted gap score of -0.15, which is low. The weighted gap score decreases to -2.95 when the dimension weight of 20 is included, as seen in the histogram below. The study results show that respondents' perceptions of the physical aesthetic elements of home healthcare services surpass their expectations in both situations. The responsiveness dimension's average SERVQUAL impression score is 4.15.

Dimension	**Code**	**Average Perception Score**	**Average Expectation Score**	**Gap score**	**Average Percepition Servqual score**
Responsiveness	**R1**	4.21	4.37	-0.16	4.15
	R2	4.09	4.24	-0.15	
	R3	4.15	4.28	-0.13	

Dimension weight	20
Average Unweighted Tangibility gap score	-0.15
Weighted Tangibility gap score	-2.95

Table 9. Servqual results – Responsiveness dimension

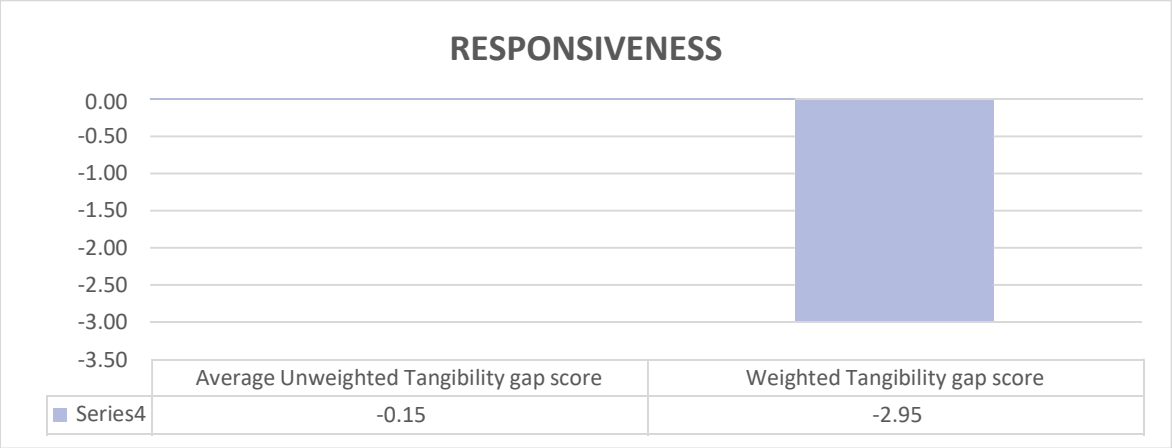

Figure 10. Responsiveness dimension- Unweighted and weighted gap score

4.3.4 The Assurance Dimension

On the assurance dimension, four out of the 20 measures gauge respondents' perceptions of the real benefits of home healthcare. Customers' expectations are higher than their perceptions, according to the negative gap score. inside these areas The positive gap score in the other two categories—facilities and staff—indicates that customers have higher expectations of these locations than they actually do. In the assurance part of customer satisfaction, the average unweighted gap score is -0.14. The weighted gap score increases to -3.03 when the dimension weight of 22 is included, as seen in the histogram below. The study results show that respondents' perceptions of the physical aesthetic elements of home healthcare services surpass their expectations in both situations The study results show that respondents' perceptions of the physical aesthetic elements of home healthcare services surpass their expectations in both situations. The assurance dimension's average SERVQUAL impression score is 4.18.

Dimension	**Code**	**Average Perception Score**	**Average Expectation Score**	**Gap score**	**Average Percepition Servqual score**
Assurance	**A1**	4.17	4.36	-0.20	4.18
	A2	4.20	4.32	-0.12	
	A3	4.17	4.30	-0.13	

	A4	4.20	4.30	-0.11	

Dimension weight	22
Average Unweighted Assurance gap score	-0.14
Weighted Assurance gap score	-3.03

Table 10. Servqual results – Assurance dimension

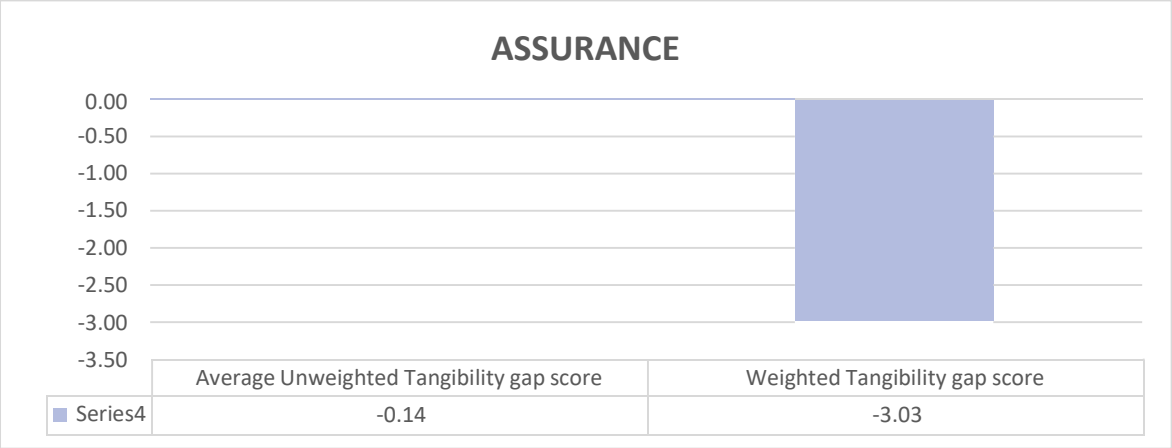

Figure 11. Assurance dimension- Unweighted and weighted gap score

4.3.5 The Empathy Dimension

The responses to three of the 20 items on the empathy dimension are evaluated in terms of how they interpret the physical aspects of home care. Customers' expectations are higher than their perceptions, according to the negative gap score. inside these areas The positive gap score in the other two categories—facilities and staff—indicates that customers have higher expectations of these locations than they actually do. The average unweighted gap score for the customer satisfaction component's empathy is -0.11. The weighted gap score decreases to -2.55 when the dimension weight of 24 is used, as seen in the histogram below. The study results show that respondents' perceptions of the physical aesthetic elements of home healthcare services surpass their expectations in both situations. The tangibility dimension's SERVQUAL average impression score is 4.21.

Dimension	**Code**	**Average Perception Score**	**Average Expectation Score**	**Gap score**	**Average Percepition Servqual score for Assurance**
Empathy	**E1**	4.17	4.26	-0.09	4.18
	E2	4.18	4.29	-0.11	

	E3	4.20	4.32	-0.12	

Dimension weight	24
Average Unweighted Assurance gap score	-0.11
Weighted Assurance gap score	-2.55

Table 11. Servqual results – Empathy dimension

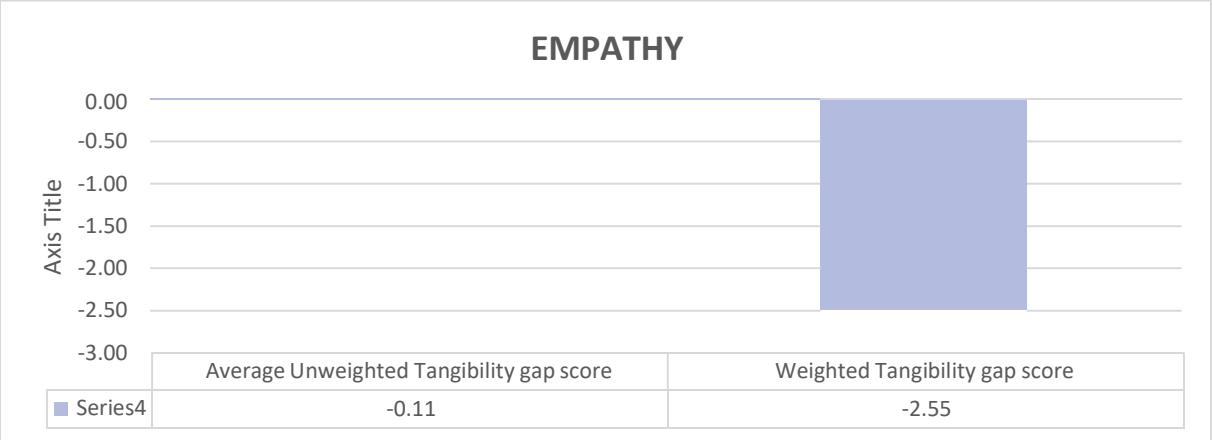

Figure 12. Empathy dimension- Unweighted and weighted gap score

Dimension	Average unweighted	Weighted Gap Score
Tangibility	-0.12	-1.74
Reliability	-0.2	-4.03
Responsiveness	-0.15	-2.95
Assurance	-0.14	-3.03
Empathy	-0.11	-2.55

Table 12. Servqual gap score- all dimensions

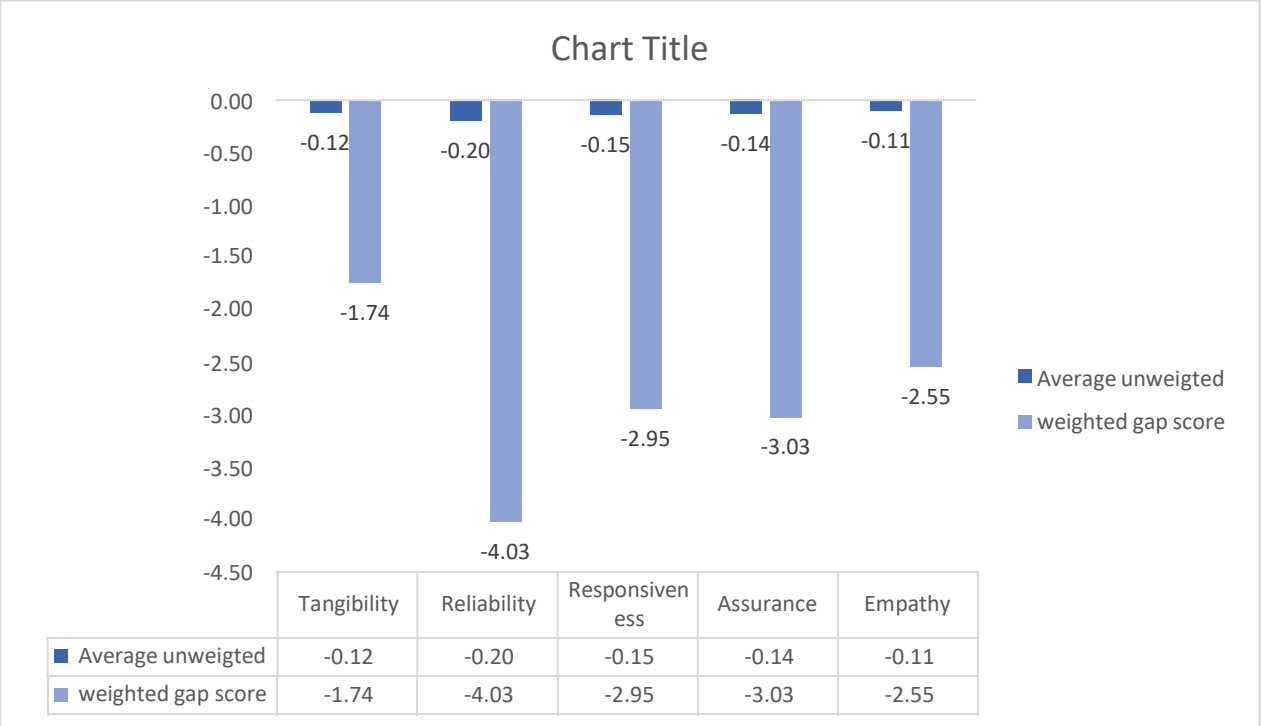

Figure 13. Servqual gap score- all dimensions

The maximum gap was observed for the reliability dimension out of other dimensions.

4.4 Average Servqual Perception Score

Dimension	**Maximum Score**	**Average Servqual Perception score**
Assurance	5	4.21
Reliability	5	4.16
Responsiveness	5	4.15
Assurance	5	4.18
Empathy	5	4.18

Table 13. Average Servqual perception

CHAPTER 5: DISCUSSION

Zeithaml, Parasuraman, and Berry, the creators of SERVQUAL, assert that it is essential for leaders to set up a process for consistently tracking customer perceptions of service quality, pinpointing the root causes of service quality shortcomings, and taking appropriate action to raise the standard of the services rendered. As a consequence, the current study, out of the 20 questions across the five dimensions, clearly identifies areas where the perceived difference is bigger than the average gap. The table below includes the gap score and commentary for each of the 20 subcategories.

QUESTIONNAIRE	GAP SCORE	REMARKS
Assurance - Staff's uniform will be clean, nice and neat	-0.02	Failed to match customers' expectations
Assurance - The staff is speaking the preferred language	-0.12	Failed to match customers' expectations
Assurance - The staff does things on time	-0.17	Failed to match customers' expectations
Assurance - The staff is answering all the questions related to past experiences	-0.17	Failed to match customers' expectations
Assurance - The staff never lies and maintains the transparency	-0.14	Failed to match customers' expectations
Reliability- Staff is responding quickly whenever questioned	-0.28	Failed to match customers' expectations
Reliability- Staff is having the basic required medical knowledge	-0.24	Failed to match customers' expectations
Reliability- Staff gives the medications on time	-0.14	Failed to match customers' expectations
Reliability- Staff takes readings on time	-0.21	Failed to match customers' expectations
Reliability- Staff solves the problems sincerely	-0.13	Failed to match customers' expectations
Responsiveness- Staff is always willing to help	-0.16	Failed to match customers' expectations
Responsiveness- Staff is never too busy to respond the patient request	-0.15	Failed to match customers' expectations

Responsiveness- Quick medical treatment response when needed	-0.13	Failed to match customers' expectations
Assurance- The patients feel safe around the staff	-0.20	Failed to match customers' expectations
Assurance- Staff is not touching any personal belongings	-0.12	Failed to match customers' expectations
Assurance- Staff is trustworthy even in the absence of other family members	-0.13	Failed to match customers' expectations
Assurance- Staff obeys the rules even in the absence of other family members	-0.11	Failed to match customers' expectations
Empathy- Staff gives personal attention when required	-0.09	Failed to match customers' expectations
Empathy- Staff understands the specific needs	-0.11	Failed to match customers' expectations
Empathy- Staff is understanding, careful and friendly	-0.12	Failed to match customers' expectations

Table 14. SERVQUAL Gap scores and remarks

INTERVENTION AREAS FOR IMMEDIATE INTERVENTION:

Action area	Gap
Reliability- Staff is responding quickly whenever questioned	-0.28
Reliability- Staff is having the basic required medical knowledge	-0.24
Reliability- Staff takes readings on time	-0.21
Assurance- The patients feel safe around the staff	-0.20
Assurance - The staff does things on time	-0.17
Assurance - The staff is answering all the questions related to past experiences	-0.17

Table 15. Intervention areas for immediate intervention

Other elements, such as staff reaction, medical expertise, taking readings on time, and so on, are simple to intervene in and make fast modifications to meet any staff response. However, in terms of sensitivity and behavioral training for personnel, areas such as personal attention, patient safety, and staff conduct fostering trust would be essential. Subject training, as well as refresher courses on fundamental communication skills and capacity building of the staff when

working with home healthcare patients in the long term, would be necessary in areas such as employee knowledge.

INTERVENTION AREAS FOR MEDIUM TERM ATTENTION:

Action area	Gap
Reliability- Staff solves the problems sincerely	-0.13
Assurance- Staff is trustworthy even in the absence of other family members	-0.13
Assurance - The staff never lies and maintains the transparency	-0.14
Reliability- Staff gives the medications on time	-0.14
Responsiveness- Staff is never too busy to respond the patient request	-0.15
Responsiveness- Staff is always willing to help	-0.16

Table 16. Intervention areas for medium term attention

Problem resolution, employee trustworthiness, and openness are all aspects that are comparatively simpler to attain. However, in areas like as responsiveness, personalized attention, and understanding customers' demands, an intervention in terms of sensitivity and behavioral training for staff would be necessary. However, this would need management support in terms of realistic objectives, so that staff may devote some time to meeting the customers'/patients' needs for responsiveness and empathy. Grievance redressal improves consumer perceptions, whether good or negative, by addressing customer complaints in such a way that customers' perceptions improve.

AREAS OF INTERVENTION DESERVING LONG-TERM ATTENTION:

Action area	Gap
Assurance - Staff's uniform will be clean, nice and neat	-0.02
Empathy- Staff gives personal attention when required	-0.09
Assurance- Staff obeys the rules even in the absence of other family members	-0.11
Empathy- Staff understands the specific needs	-0.11
Assurance - The staff is speaking the preferred language	-0.12
Empathy- Staff is understanding, careful and friendly	-0.12

Table 17. Intervention areas for long term attention

The home healthcare services delivered by the organization seems to have taken efforts to inculcate the courteousness in its staff, even better than what a typical consumer would anticipate, the firm that provides home healthcare services appears to have made an effort to instill politeness in its staff members. They are consistently eager to assist and are well-

groomed. The management must make every effort to uphold the high standards of service delivery in these areas, or else it won't take long for customer perception gaps to appear and bring the standards down.

Limitations of Servqual tool

Limitations of the Study and Future Directions of Research The SERVQUAL instrument will only be used in the present study to evaluate and accomplish the research aim. As a consequence, it is obvious that any instrument flaws are also present in the current investigation. One issue with SERVQUAL-based research is that expectations are generated long before the actual service delivery, making it less reliable because customer expectations and perceptions can only be compared after the service is provided (Palmer, 2005). Additionally, previous service encounters are frequently the basis for a client's service expectations.

As a result, it's likely that expectations change after each service delivery, which would also change perception.

The SERVQUAL model, which omits the technical element of service delivery as a substantial component of the total service process, primarily attempts to quantify the functional side of the service process (Lenka et al., 2009). One approach would be to group the respondents according to their demographic traits, then compare the results. The study can be broadened to include evaluations of additional nationally regulated home healthcare organizations. A consumer rights charter for home healthcare services might be developed using the results of more study on the subject

CHAPTER 6: CONCLUSION

'The negative gaps imply that there is room for development in the service dimension.' When looking at the Weighted Gaps, the dimension of empathy is the one that stands out the most. the highest weighted gap score, then assurance and finally tangibility. Staff must get training in this area. As the most important aspect of service quality, enhancing empathy is a top priority. Patients believe that the service does not satisfy their expectations. 'The factor of empathy is really crucial, emphasized in her work. When it comes to service delivery, patient satisfaction is determined by the patient's confidence and reliance on the home healthcare services, which is represented in the behavior of hospital staff, including physicians and nurses. According to SERVQUAL's creators, Zeithaml, Parasuraman, and Berry (1990), "it is critical for organizational leaders to establish a practice of continuously monitoring customer perceptions of service delivery, identifying the causes of service quality shortfalls, and taking actions to close the gaps in service delivery." The same is offered in such regions.

implications for management. The study's conclusions based on primary data processed by the SERVQUAL tool have several administrative ramifications for home healthcare services. It is crucial for the organization to always treat the patients fairly in light of the impact that complaint resolution has on patient satisfaction and perception. Patients service requests and concerns should be addressed politely and promptly in order to boost their view of the organization's services as being of high quality and to foster a sense of trust. To establish and maintain a positive and long-lasting relationship with the clients, the organization must strengthen its policies and train its staff.

Although many types of home healthcare systems are gradually demonstrating their benefits over traditional healthcare, adoption of such systems remains a challenge. To discover real performance and identify the next step, evaluation is required. The scope of any home healthcare assessment can include the whole life cycle of any home healthcare system, which includes planning, design, implementation, use, and maintenance throughout time. The focus might alter depending on whatever stage is being reviewed. Managers require information on dissatisfaction with service quality and the organization's broader culture to prioritize implementation in the pre-implementation stage.

The SERVQUAL paradigm was utilized to develop an instrument to rate the caliber of home healthcare services in response to this need. In pre-implementation research, a SERVQUAL questionnaire and key performance analysis were also employed. This makes the necessity for staff training quite clear. The sole means of preventing the long-term advantages and progression of the issues are staff behavior, honesty, medical knowledge, and grievance

redressal. Particularly when the expectations are high in relation to the services offered at the lowest cost, some components of expectations are elusive and hard to measure. It will stand out because of the trust that has been established by making services more affordable while yet offering the finest quality services.

REFERENCES

1. Chawla, N. A. (2021, June 18). *At place with COVID: How pandemic boosted telemedicine and home healthcare services. . .* The New Indian Express. https://www.newindianexpress.com/magazine/2021/jun/20/at-place-with-covid-how-pandemic-boosted-telemedicineandhome-healthcare-services-2317743.html
2. Mohebifar, R., Hasani, H., Barikani, A., & Rafiei, S. (2016). Evaluating Service Quality from Patients' Perceptions: Application of Importance–performance Analysis Method. *Osong Public Health and Research Perspectives*, *7*(4), 233–238. https://doi.org/10.1016/j.phrp.2016.05.002
3. *Types of Home Health Care Services*. (2022, January 26). Johns Hopkins Medicine. https://www.hopkinsmedicine.org/health/caregiving/types-of-home-health-care-services
4. *SERVQUAL Model of Measuring Service Quality*. (2019, December 7). Theintactone. https://theintactone.com/2019/03/02/om-u2-topic-6-servqual-model-of-measuring-service-quality/
5. Sharma, S. (2016). Using SERVQUAL to Assess the Customer Satisfaction Level: A Study of an Urban Cooperative Bank. *Journal of Economics and Public Finance*, *2*(1), 57. https://doi.org/10.22158/jepf.v2n1p57
6. *Types of Home Health Care Services*. (2022, January 26). Johns Hopkins Medicine. https://www.hopkinsmedicine.org/health/caregiving/types-of-home-health-care-services
7. Zeithaml, V. A., Berry, L. L., & Parasuraman, A. (1996). The Behavioral Consequences of Service Quality. *Journal of Marketing*, *60*(2), 31–46. https://doi.org/10.1177/0022242996060002

ANNEXURE

SERVQUAL QUESTIONNAIRE INCLUDED IN THE STUDY:

Code	Expectations	(E)	Perceptions	(P)	P-E
	This Survey Deals With Patient's Opinions Of Home Healthcare Services		The Following Statements Relate To How Patients Received The Services		
Tangible					
T1	Staff's Uniforms Should Be Clean, Nice And Neat		Staff's Uniform Should Be Clean, Nice, And Neat		

T2	They Speak The Preferred Language		The Staff Is Speaking The Preferred Language		
T3	The Staff Should Do Things On Time		The Staff Does Things On Time		
T4	The Staff Should Be Truthful About The Past Experiences		The Staff Is Answering All The Questions Related To Past Experiences		
T5	The Staff Should Not Lie And Should Maintain The Transparency		The Staff Never Lies And Maintains The Transparency		
Average Tangible Servqual Score					
Reliability					
Rl1	Staff Should Respond Quickly		Staff Is Responding Quickly Whenever Questioned		
Rl2	Staff Should Have The Basic Required Medical Knowledge		Staff Is Having The Basic Required Medical Knowledge		
Rl3	Staff Should Give The Medications On Time		Staff Gives The Medications On Time		
Rl4	Staff Should Take The Readings On Time		Staff Takes Readings On Time		
Rl5	Staff Should Solve The Problems Sincerely		Staff Solves The Problems Sincerely		
Average Servqual Reliability Score					
Responsiveness					
R1	Staff Should Always Be Helpful		Staff Is Always Willing To Help		
R2	Staff Is Never Too Busy To Respond The Patient Request		Staff Is Never Too Busy To Respond The Patient Request		
R3	Quick Medical Treatment Response When Needed		Quick Medical Treatment Response When Needed		
Average Servqual Reponsiveness Score					
Assurance					

A1	The Patients Should Feel Safe Around The Staff		The Patients Feel Safe Around The Staff		
A2	Staff Should Not Touch Any Personal Belongings		Staff Is Not Touching Any Personal Belongings		
A3	Staff Should Be Trustworthy Even In The Absence Of Other Family Members		Staff Is Trustworthy Even In The Absence Of Other Family Members		
A4	Staff Should Follow The Rules Even In The Absence Of Other Family Members		Staff Obeys The Rules Even In The Absence Of Other Family Members		
Average Servqual Assurance Score					
Empathy					
E1	Staff Should Give The Personal Attention When Required		Staff Gives Personal Attention When Required		
E2	Staff Understands The Specific Needs		Staff Understands The Specific Needs		
E3	Staff Should Be Understanding, Careful And Friendly		Staff Is Understanding, Careful And Friendly		
Average Servqual Empathy Score					

Table 18. Servqual questionnaire

SCORE TABLE USED IN THE QUESTIONNAIRE

SCORES	
Very Bad	1
Bad	2
Average	3
Good	4
Very Good	5

Table 19. Score table

Average Unweighted Servqual Gap Score	Score
Assurance	
Reliability	
Responsiveness	
Assurance	
Empathy	
Total	
Average Unweighted Servqual Gap Score	

Table 20. Average Unweighted Servqual Gap Score table

SERVQUAL IMPORTANCE WEIGHT:

Listed below are the five features that are related to the services undertaking in the organization. This helps in knowing how much each of the domain is important for the patient. The points should add upto 100. The patient attender was asked to do the rating and the average importance weight was tabulated.

Importance Weightage	Points
Assurance	
Reliability	
Responsiveness	
Assurance	
Empathy	
Total	**100**

Table 21. Importance weightage score

SERVQUAL WEGHTED SCORE:

Servqual Dimension	Score From Table (unweighted score)	Score From Table (importance weight)	Weighted Score
Average Tangible Servqual Score			
Average Servqual Reliability Score			

Average Servqual Responsiveness Score			
Average Servqual Assurance Score			
Average Servqual Empathy Score			
Total			
Weighted Servqual Score			

Table 22. Weighted score table

Multiplying the score from the unweighted score and importance weight score, then the result we get is the weighted score.

SERVQUAL Dimension Score from Table (unweighted score) X Importance Weight from Table (importance weight) = Weighted Score

CONSOLIDATED TABLE OF ALL FIVE DIMENSIONS:

Dimension	**Code**	**Performance**	**Expectation**	**Gap score**	**Average Servqual Gap Score**	**Dimension Weight**	**Average Unweighted Gap Score**	**Weighted Gap Score**
		Average	**Average**					
Assurance	**T1**							

	T2							
	T3							
	T4							
	T5							
Reliability	**RL 1**							
	RL 2							
	RL 3							
	RL 4							
	RL 5							
Responsiveness	**R1**							
	R2							
	R3							
Assurance	**A1**							
	A2							
	A3							
	A4							
Empathy	**E1**							
	E2							
	E3							

Table 23. Consolidated table used for the chart preparation in each dimension